

# FLIGHTMATIC, INC.

Aviation training devices

## F208 FLIGHT SIMULATOR

### Vista Twin

## VISTA SERIES GENERAL AVIATION VISUAL AND INSTRUMENT FLIGHT SIMULATOR

### DESCRIPTION

The F208 is a low cost full flight simulator with the appearance and flight characteristics of a light twin. It can be used to teach advanced students twin transition as well as meet currency requirements for the twin rated instrument pilot. In the single-engine mode, the F208 can be used to teach all primary flight maneuvers and instrument procedures of a high-performance aircraft. Training can be done in simulated VFR or IFR conditions with all the instruments and controls functioning realistically. *Flight* in the F208 requires the development of the same skills and techniques required for visual and instrument aircraft operation.

### FEATURES

- Panoramic projection
- Primary flight, ground reference, full instruments
- Emergency procedure training
- Asymmetrical power and VMC effects
- Fully automatic solo flight
- Solid state reliability
- 100% FAR 141 approved
- VFR and IFR flight in day or night conditions
- Automatic pen recorder
- Interior IFR plotting chart with aircraft position indicator showing position, heading and track
- Converts instantly to a single-engine constant speed, retractable gear, high-performance aircraft



### OPERATIONAL CONTROLS

Control Yoke	Starter Switch (L/R)
Elevator Trim	Throttle Control (Dual)
Rudder Pedals	Propeller Pitch & Feather (Dual)
Rudder Trim	Mixture Control (Dual)
Parking Brake	Fuel Selector Switch (2)
Flap Control (Sw.)	Cowl Switch (2)
Flap Position Indicator	Fuel Pump Switch (2)
Gear Switch	Alternator Switch (2)
Gear Position Indicator	Stall Warner
Master Switch	Stall Warning Light
Magneto Switches (4)	

### EQUIPMENT CONTROLS

Chart Position Ind. Switch	Engine Sound—
Attitude Display Switch	Off/On/Volume
Chart Drive Switch	Key Switch & Indicator Light

### STANDARD INSTRUMENTS AND AVIONICS

#### ENGINE

Hobbs Meter  
Tachometer (Dual)  
Manifold Pressure Indicator (Dual)  
Fuel Flow Indicator (Dual)  
Fuel Quantity Indicator (2)  
Suction Indicator  
Alternator Ammeter (2)  
Cylinder Head Temp. Ind. (2)  
Oil Temperature Indicator (2)  
Oil Pressure Indicator (2)

#### FLIGHT

Attitude-Gyro Indicator  
Directional-Gyro Indicator  
Altimeter  
Vertical Speed Indicator  
Airspeed Indicator  
Turn & Bank Indicator  
Compass  
Aircraft Clock

#### AVIONICS

ADF Bearing Indicator  
ADF-RMI Ind. (Optional)  
VOR/ILS Indicator  
VOR Bearing Indicator  
NAV/COM Radio No. 1  
NAV/COM Radio No. 2  
ATC Transponder  
DME Miles Indicator  
MKR BCN — Off/On/Volume  
MKR BCN Indicators

#### INSTRUCTOR CONTROLS

Wind Velocity Control  
Wind Direction Control  
Fuel Quantity Control  
Twin/Single Op. Switch

#### Failures:

Gyro Suction Fail  
Oil Temp./Pressure Fail  
Engine Fail (L/R)  
Mains Fuel/Auto. Depletion  
Aux. Fuel/Auto. Depletion  
VOR/LOC Fail  
DME Fail  
ADF Fail  
MKR BCN Fail

## VFR (BASIC VISUAL FLIGHT)

VISTA simulators, for the first time, bring the realism of panoramic projection into general aviation flight training. A special visual flight projector reacts precisely and realistically to aircraft controls. Your students can duplicate and practice every VFR flight maneuver . . . climbs, descents, glides, rectangles, turns and stalls . . . all with true reference to ground. A flight pattern reference chart can be placed in front of the student, showing traffic patterns, S-turns, or any other pattern you wish to create. Panoramic projection can be superimposed easily on these ground reference patterns by the flip of a switch

## REALISTIC GROUND TRAINING

VISTA s are the only general aviation-level trainers offering the total realism of visual flight simulation. Panoramic projection adds an exciting new dimension to student training not available in any other comparably-priced equipment. Attitude changes are "seen out the window", just as they would be in the aircraft. Panel instruments and visual horizon automatically show all the effects of rudder, elevator and aileron movements. There's even realistic engine sound which responds smoothly and accurately to throttle changes and out of sync. conditions.

## \*\*IFR (RADIO NAVIGATION)

All Flightmatic Trainers have a unique, airplane-shaped Position Light to show the student what's happening as he intercepts, tracks, holds and maneuvers. The Position Light appears on a plotting board above the instrument panel and shows the exact position and heading visualization required for instrument flight. An IFR film strip can be projected to simulate IFR environment. A complete package of avionics permits teaching and practice of virtually every type of instrument approach and procedure. A plotting board monitors the student's progress via an automatic inked stylus. This map display becomes a permanent part of the student's progress record.

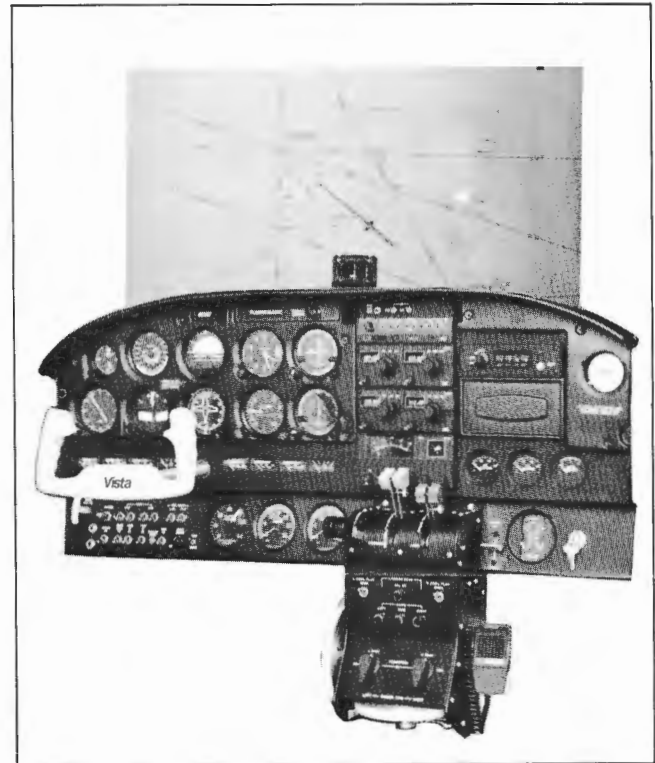
\*\*CO-NAV option available.

## SAFER, MORE EFFECTIVE

VISTA Flight simulators provide a ground training atmosphere geared as closely as possible to the true flight experience. Your students learn on a VISTA, then confidently advance to flight lessons in the aircraft with the same panel configuration and controls. The instruments they use, what they see and feel . . . bank, power, slip and skids . . . are all familiar. The result, rapid progress by the student toward a safe solo flight and eventual certification. All models incorporate provisions for safe emergency procedures training.

## APPLICATIONS AND TEACHING CAPABILITY

VFR	GROUND REFERENCE	IFR
Instrument & Control Functions	Wind Effect	Attitude Instrument Flight
Airplane Familiarization	Crab Angles	Communications
Take-Offs	Traffic Patterns	ATC Procedures
Landings	Rectangular Patterns	VOR
Straight & Level	Eights On Pylons	VORTAC
Normal Turns	Chandelles	ADF (LOM)
Steep Turns	"S" Turns Across Road	MARKER BEACONS
Climbs	Turn-Around-A-Point	ILS
Glides	Forced Landings	LOCALIZER
Slow Flight	Touch-N-Go	DME
Slips		
Stalls & Accelerated Stalls		
Attitude Flight		
Flap Effects		
Partial Panel		
Solo Practice	Solo Practice	Solo Practice
Flight Path	Flight Path	Flight Path
Recorder	Recorder	Recorder
Projected Attitude (VFR, IFR, Night)	Projected Attitude (VFR, IFR, Night)	Projected Attitude (VFR, IFR, Night)



## EQUIPMENT SPECIFICATIONS

CHARACTERISTIC	SPECIFICATIONS
Power Requirements	115V, 50—60 Hz, single phase, 650 watts
Overall Size*	59" L x 40" W x 62" H
Weight, Lbs.	430
Crated Size	66" L x 49" W x 50" H
Crated Weight, Lbs.	570
Operating Temperature	—10° C to 50° C
Storage Temperature	—25° C to 70° C
Humidity Range	0 to 90% relative humidity at 32° C
Control Yoke Travel	Pitch Axis: 5½", Roll Axis: 60° L & R
Attitude-Gyro Limits	Pitch: ±15° Bank: 60° L & R
Attitude Display Limits	Pitch: ±15° Bank: 60° L & R, Turn Rate: 8° /sec. max.
Directional-Gyro Turn Rate	0—10,000 Feet, 2—pointer, 1,500 fpm max. rate.
Altimeter	600 sq. miles, 1 inch = 1 nautical mile**
Navigation Chart Area	Varied through 360° .0 to 40 knots
Wind Direction & Velocity	VOR: ±10° F.S., C.D.I.,
NAVAID Sensitivity	LOC: ±2.5° F.S.,
	G/S: ±50 ft. 2-dot deflection.

\*Unit disassembles for easy installation through standard doors.

## — WARRANTY —

VISTA Flight Trainers are guaranteed by Flightmatic, Incorporated, against defects in materials and workmanship. Parts and replacement service will be supplied at no charge for a period of ninety (90) days from date of delivery. All parts are fully guaranteed for a period of two (2) years from date of delivery. Guarantees do not apply to equipment improperly handled or operated in excess of specified limits.